West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For General Permit Registration and Permit Renewal Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-MSWLGP-2011-03300129**
Application Received: November 4, 2010
Plant Identification Number: **033-00129**
Permittee: **S & S Grading, Inc.**
Mailing Address: **Route 5, Box 559, Clarksburg, WV 26301**

Physical Location:	Clarksburg, Harrison County, West Virginia
UTM Coordinates:	551.08 km Easting • 4341.24 km Northing • Zone 17
Directions:	From I-79 take Exit 110. Follow Route 270 west towards West Milford. Go through West Milford to the junction with US Route 19. Turn right onto US Route 19 north. Follow for approximately 1.5 miles to landfill.

Facility Description

The S & S Grading, Inc. S & S Landfill (NAICS 562212, SIC 4953) is a 65.87 acre municipal solid waste landfill that began operation in 1975. S&S receives approximately 120,000 tons of waste per year. The S & S Landfill has a design capacity of 5,517,700 Mg of which approximately 925,900 Mg has been capped and closed, 1,915,100 Mg is currently active, and 2,640,700 Mg for the future use.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]

Regulated Pollutants	Potential Emissions	2009-2010 Actual Emissions
Carbon Monoxide (CO)	194.65	2.62
Nitrogen Oxides (NO_X)	10.07	0
Particulate Matter (PM_{10})	39.44	6.8
Total Particulate Matter (TSP)	195.75	51.39
Sulfur Dioxide (SO_2)	0	0
Volatile Organic Compounds (VOC)	25.25	10.63

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2009-2010 Actual Emissions
Total HAPs*	15.8	6.09

Some of the above HAPs may be counted as PM or VOCs

*No individual HAP was more than 5.5 TPY. Individual HAP with maximum potential emission is Toluene with potential emission of 5.407 TPY.

Regulated Pollutant other than Criteria & HAP	Potential Emissions	2009-2010 Actual Emissions
Non Methane Organic Compounds (NMOC)	77.81 Mg	2.98 Mg
Carbon Dioxide	33,113	14,688
Methane	12,069	5,353

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2009) is 2.98 Mg/yr. The site specific NMOC concentration of 55.9 ppmv was used to calculate this value. The potential emission rate was estimated using EPA's Landfill Gas Emissions Model (LandGEM) software. The regulatory default value for NMOC was used in the model along with the maximum annual waste acceptance rate. The projected closure year is 2042 with a projected maximum NMOC emission rate estimate of 77.81 Mg/yr.

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, S & S Landfill is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary sources
	45CSR16	New Source Performance Standards
	45CSR23	To Prevent and Control Emissions from Municipal Solid Waste Landfills
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
	40 C.F.R. Part 60 Subpart WWW	Standard of Performance for Municipal Solid Waste Landfills
	40 C.F.R. Part 60.18	NSPS flare requirements
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and other sources of Fugitive Particulate Matter
	45CSR42	Greenhouse Gas Emissions Inventory Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-2721	8-14-2007	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

Since the last renewal the following has changed:

1. Construction permit R13-2721 has been issued to install 12 landfill gas flares to control odor. The installation of flares is being performed in advance of the regulatory requirements for an active gas collection system and is completely voluntary at this time. The combined total emissions from these flares have limits for NOx, CO and PM; these are secondary emissions from the flares. The permit limits in R13-2721 were based on maximum landfill gas generation and AP-42 factors. Therefore, keeping records of landfill gas consumed/fed according to section 5.4.5 of R13-2721 will demonstrate compliance with the emission limits in section 5.1.1 of R13-2721.
2. A solidification pit was added in 2011. Solidification pit will store flyash and sawdust which will be used to mix with liquid waste to solidify prior to disposal in the landfill. Potential fugitive emission from this solidification pit will be 0.34 TPY. The solidification pit shall be subject to fugitive control requirements in Section 3.0 of the General Permit.

Following is a discussion of applicability and non-applicability of rules mentioned in the general permit to this facility:

1. 45CSR4 – Flares will be installed to control odor. Also according to section 3.1.4 of the general permit, facility has to comply with 45CSR§4-3.1 to control odor.

2. 45CSR6 – Flares are subject to 45CSR6. The allowable particulate matter limit for the flare is calculated to be 0.54 lb/hr (45CSR§6-4.1). The particulate matter emission limit from each flare is determined by the following formula (45CSR§6-4.1):
   PM Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)
   Where: F = 5.43

   [The capacity of the flare was determined by the combustibles to the flare (4,000 acf/hr) and the methane density (0.0415 lb/ft^3). This result in a capacity of 199.2 lb/hr or 0.0996 tons/hr].

   PM Emissions (lb/hr) = 5.43 x 0.0996 tons/hr = 0.54 lb/hr

   According to section 5.1.1 of R13-2721, each flare has a PM limit of 0.09 lb/hr. Therefore, the facility will meet the limitation of 45CSR6 as calculated above.

   The visible emission limit for the flare is 20% opacity (45CSR§6-4.3) with the exception to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up (45CSR§6-4.4). Compliance with the opacity limits will be demonstrated through monthly visible emission checks and recordkeeping according to sections 5.2.1 & 5.4.1 of R13-2721.

3. 45CSR7 – This rule is not applicable because there is no manufacturing process at this facility.

4. 45CSR17 - Facility shall comply with 45CSR17 by complying with section 3.0 of the permit.

5. 40 C.F.R. Part 60 Subpart WWW - *Standards of Performance for Municipal Solid Waste Landfills*, and 45CSR23 - *To Prevent and Control Emissions from Municipal Solid Waste Landfills*

   This facility is subject to these rules according to 60.750(a) because this landfill commenced construction, reconstruction or modification on or after May 30, 1991. This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters; hence the facility has to comply with the following sections of Subpart WWW:

   60.752(b) – 60.752(b)(2) is not applicable if NMOC is less than 50 Mg.

   60.752(d) – this section addresses the closure of the landfill.

   60.753 - this section is not applicable if NMOC is less than 50 Mg.

60.754 – Test methods and procedures.

60.755 - this section is not applicable if NMOC is less than 50 Mg.

60.756 - this section is not applicable if NMOC is less than 50 Mg.

60.757(a) and (b) – reporting requirements for this landfill.

60.757 (c) to (g) - these sections are not applicable if NMOC is less than 50 Mg.

60.758(a) & (f) – Recordkeeping Requirements.

60.758 (b) to (e) - these sections are not applicable if NMOC is less than 50 Mg.

60.759 - this section is not applicable if NMOC is less than 50 Mg.

Note: The current NMOC emission rate estimate (calculated for year 2009) is 2.98 Mg/yr. If the calculated NMOC emission rate is equal to or greater than 50 Mg/yr, the permittee shall submit a collection and control system design plan according to 40 C.F.R. §60.752(b)(2) and also the permittee has to modify this permit because they will be subject to 40 C.F.R. §§60.752(b)(2), 60.753, 60.755, 60.756, 60.757(c) to (g), 60.758(b) to (e) and 60.759 other applicable requirements from 40 C.F.R. 60 Subpart WWW.

6. 40 C.F.R. Part 63 Subpart AAAA – A facility is subject to this subpart if the facility meets the criteria in 40 C.F.R. § 63.1935 (a) or (b).

40 C.F.R. § 63.1935 (a) If the facility owns or operates a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:
(1) The MSW landfill is a major source of HAPs.
(2) The MSW landfill is collocated with a major source of HAPs.
(3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m^3) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

This facility is not a major source of HAPs and is not collocated with a major source of HAPs.
The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m^3) and has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC [The current emission rate estimate (calculated for year 2009) is 2.98 Mg/yr].

Hence the facility is not subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1935 (a).

Note: In the future if the estimated uncontrolled emissions become more than 50 megagrams per year (Mg/yr) NMOC, then this facility will be subject to 40 C.F.R. Part 63 Subpart AAAA.

40 C.F.R. § 63.1935 (b) If the facility owns or operates a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in 40 C.F.R §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:
(1) The MSW landfill is a major source of HAPs.
(2) The MSW landfill is collocated with a major source of HAPs.
(3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 and that is not permanently closed as of January 16, 2003.

This facility do not have a bioreactor, hence the facility is not subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1935 (b).

7. 40 C.F.R. Part 60 Subpart OOO - This rule is not applicable because there is no non-metallic material processing equipment at this facility.

8. 40 C.F.R. Part 60 Subpart Kb - Tanks 2 & 3 have capacity greater than or equal to 151 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984; hence the tanks are subject to 40 C.F.R. §§ 60.116b (a), (b) and (d). The landfill leachate is mostly water and should have very low VOL vapor pressure (much less than 5.2 kPa); hence although it appears that the tanks will be subject to 40 C.F.R 60 Subpart Kb, installation of emission controls on the tanks will not be necessary due to low vapor pressure of the VOL being stored.

9. 40 C.F.R. Part 60 Subpart JJJJ - This rule is not applicable because there are no stationary spark ignition (SI) internal combustion engines (ICE) at this facility.

10. 40 C.F.R. Part 60 Subpart IIII - This rule is not applicable because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.

11. 40 C.F.R. Part 60 Subpart KKKK - This rule is not applicable because there is no stationary combustion turbine at this facility.

12. 40 C.F.R. Part 61 Subpart M - Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 40 C.F.R. §§ 61.149, 61.150, or 61.155 shall meet the requirements of 40 C.F.R. § 61.154 as described in the general permit.

13. 45CSR2 – This rule is not applicable because there are no fuel burning units at this facility.

14. 40 C.F.R. Part 63 Subpart ZZZZ - This rule is not applicable because there is no stationary RICE (A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile) at this facility.

15. 40 C.F.R. § 60.18 – the flares at the facility are non-assisted open flare subject to 40 C.F.R § 60.18 (NSPS), the NSPS requirements are specified in R13-2721 and section 5.0.1 of the general permit.

    Please note that if the calculated NMOC rate is equal to or greater than 50 megagrams per year [The current emission rate estimate (calculated for year 2009) is 2.98 Mg/yr], the owner or operator shall route all the collected gas to a control system that complies with the requirements in 40 C.F.R. §60.752(b)(2)(iii)(A) which states: "An open flare designed and operated in accordance with 40 C.F.R. §60.18 except as noted in 40 C.F.R. §60.754(e)".
    The flare (used as control device) will also be subject 40 C.F.R. §§60.756(c), 60.758(b),(b)(4),(c)(4) and other applicable requirements from 40 C.F.R. 60 Subpart WWW.

16. There are no Greenhouse Gas Clean Air Act requirements for this facility because this is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 CFR64 (CAM) – 12 landfill gas flares are permitted to control odor. The combined total emissions from these flares have limits for criteria pollutants; these are secondary emissions from the flares. These flares are not used as control devices to achieve compliance with any emission limitations or standards; according to 40 C.F.R. §64.2(a) CAM is not applicable to these flares. The facility does not have a pollutant specific emissions unit with a control device to meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

2. The following tanks are taken out of the permit because there are no applicable requirements for these tanks:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device
1	T1	Sanitary Waste Water Truck	1990	1,000 gallon	None
4	T4	High Sulfur Diesel Fuel Storage Tank	1994	1,000 gallon	None
4b	T4b	Diesel Fuel Storage Tank	2001	100 gallon	None
5	T5	Leachate Pump Station Wet Well	1993	6,000 gal	None
6a	T6a	Used Oil/Antifreeze Storage Tank	NA	55 gal	None
6b	T6b	Four Tanks (Hydraulic, Gear, Lube Oil)	1994	275 gal each	None
7a	T7a	Low Sulfur Diesel Fuel Storage Tank	2002	550 gal	None
7b	T7b	Unleaded Gasoline Storage Tank	2003	550 gal	None

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A
Ending Date: N/A

All written comments should be addressed to the following individual and office:

U.K.Bachhawat
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

U.K.Bachhawat
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.